

Week Ending March 5, 2010

Our Mission: Traveler Services; 100% accurate, anywhere, anytime

- HRTOC Motorist Quote of the Week about SSP Mark Stephenson:
"He treated me great and made me laugh. I really appreciated his service that morning. He gave me something to smile about all day. I wished I was able to tip him for helping me."
- Once again the HRTOC finished last month with zero On the Job injuries!
- "Please join me in congratulating **Mary Lampkin** on her promotion to Control Room Shift Supervisor. Mary has supported this operation for over 17 years, beginning when this was something of a kiosk-sized operation. She's not only seen it grow through its many stages, her commitment to its success has helped get it to where we it is today. I'm confident that Mary will continue to be an asset to this team as she leads the operation on her shift. Congratulations, Mary!" – Control Room Manager, Tim Fox

Did you know...

The retiming of traffic lights is one of the most cost effective ways to improve traffic flow. Signal retiming can significantly reduce delays and stops experienced by motorists, which can improve safety and reduce fuel consumption and emissions. Typically, the benefit to cost ratio for signal retiming is about 40:1

CNN reports that the timing of many signals throughout the country have not been adjusted in the last 10 years despite large changes in local populations.

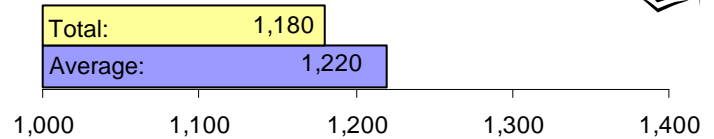
In 2001 Gainesville, FL retimed traffic signals at 8 intersections reducing average arterial delay by 94% and arterial stops by 77%, resulting in an estimated annual fuel savings of 3,300 gallons and overall annual cost savings of \$93,000.

Sources:

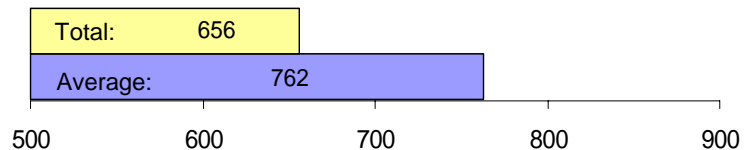
<http://www.cnn.com/video/#/video/us/2010/03/02/foreman.how.to.improve.traffic.cn.n?iref=allsearch>
<http://www.spcregion.org/downloads/ops/Other%20Studies/BenefitsofRetimingTrafficSignals.pdf>

Operations & Maintenance Summary

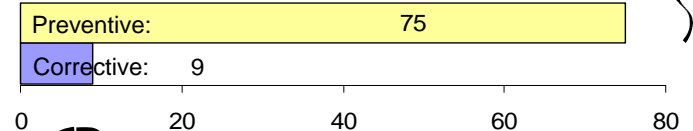
Number of events responded to from the Control Room last week:



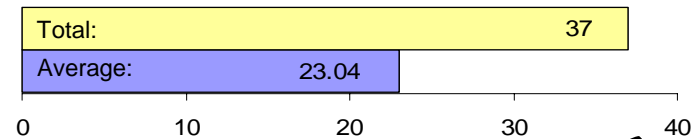
Total number of drivers assisted by Safety Service Patrollers last week:



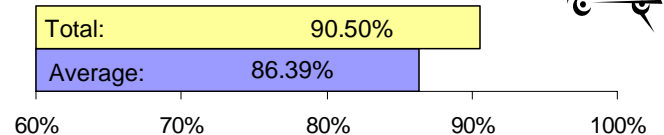
Number of field equipment responsive and preventive repairs made last week:



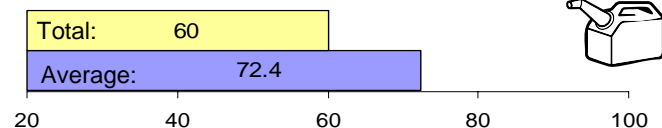
IT Work Orders completed last week:



SSP Truck Availability Last Week:



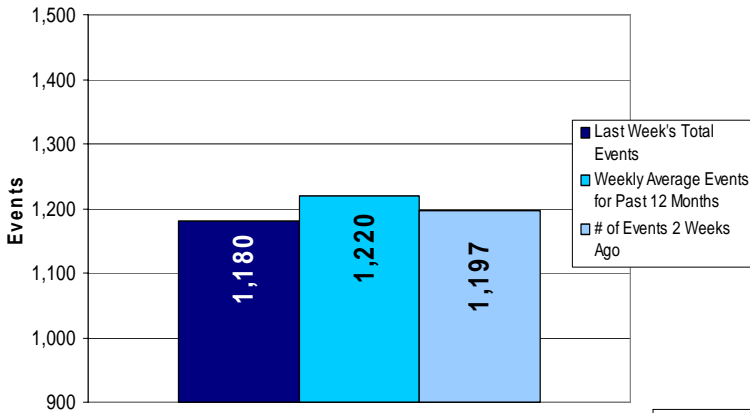
Number of Gallons Dispensed During SSP Fuel Assists Last Week:



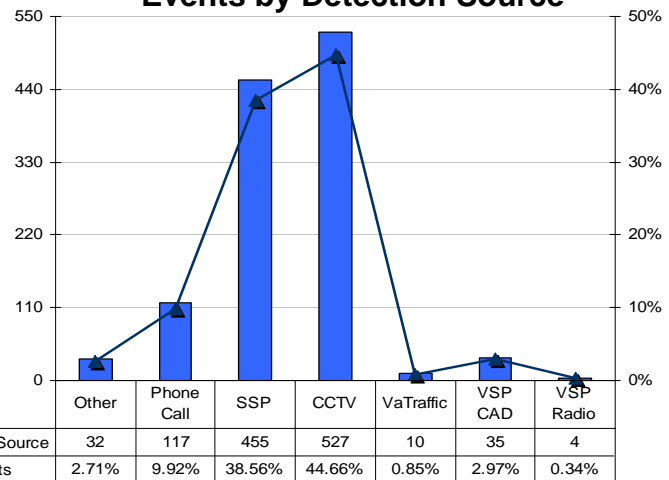


Operations

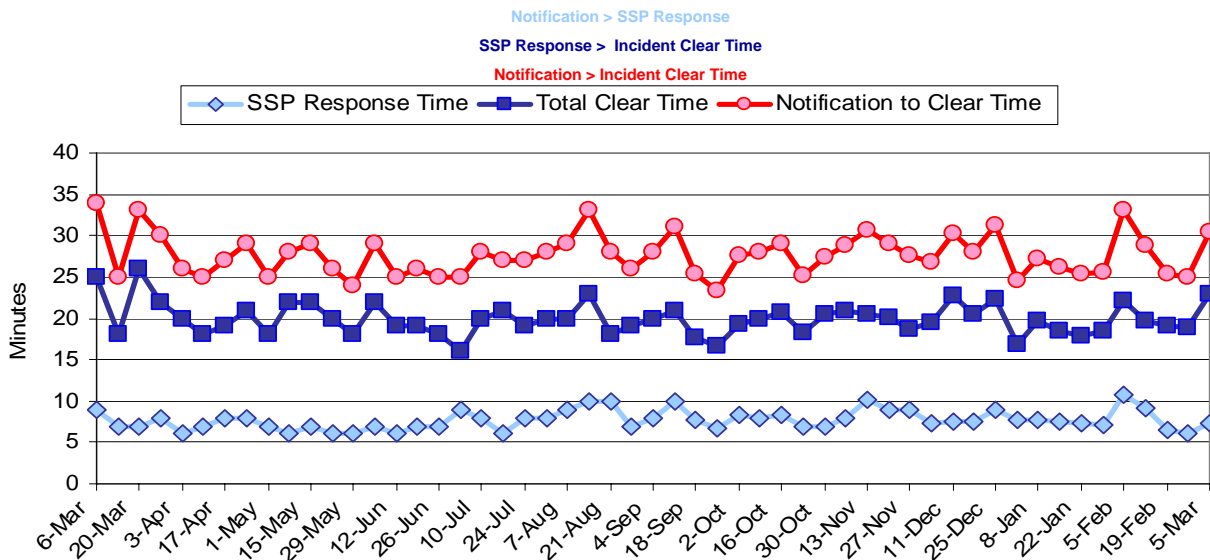
Number of Events Logged by the Control Room



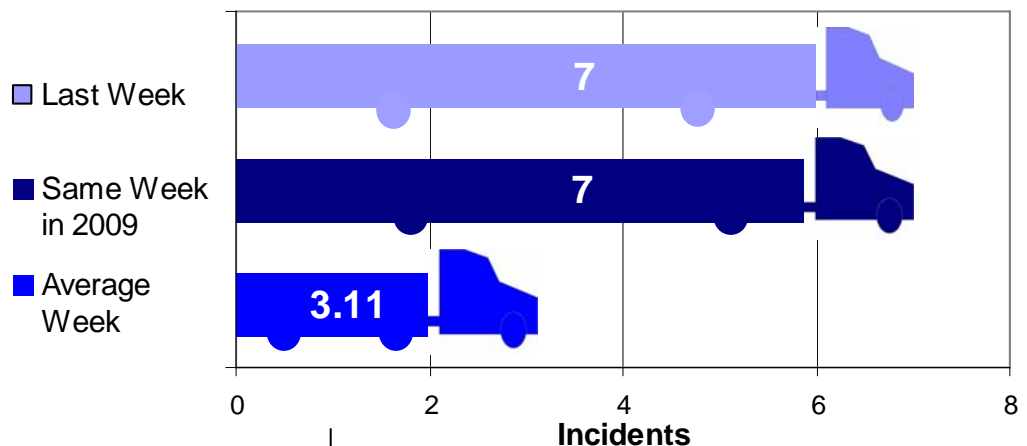
Events by Detection Source



Incident Duration



Number of Incidents Involving Tractor Trailers



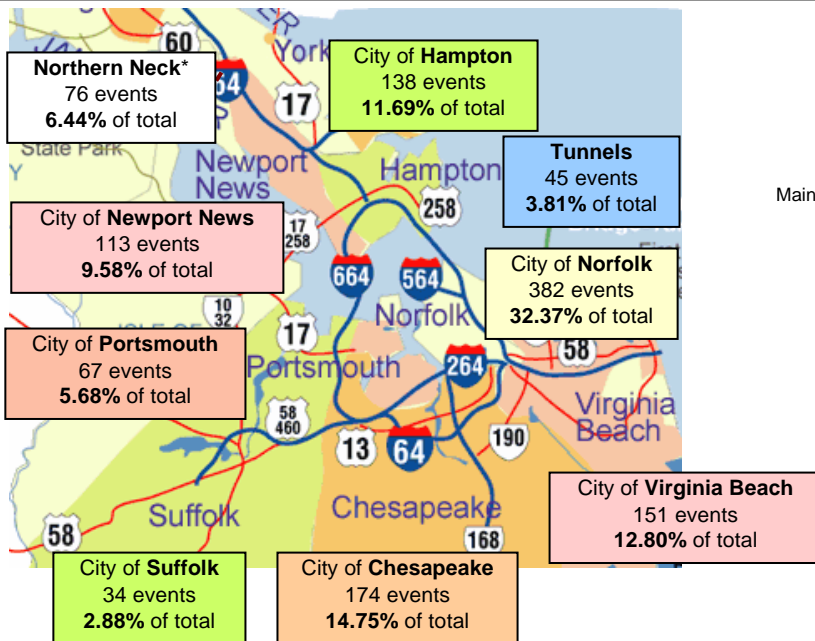
Need Clarification?

A Data Key starting on page 8 provides explanations for every chart in this report.

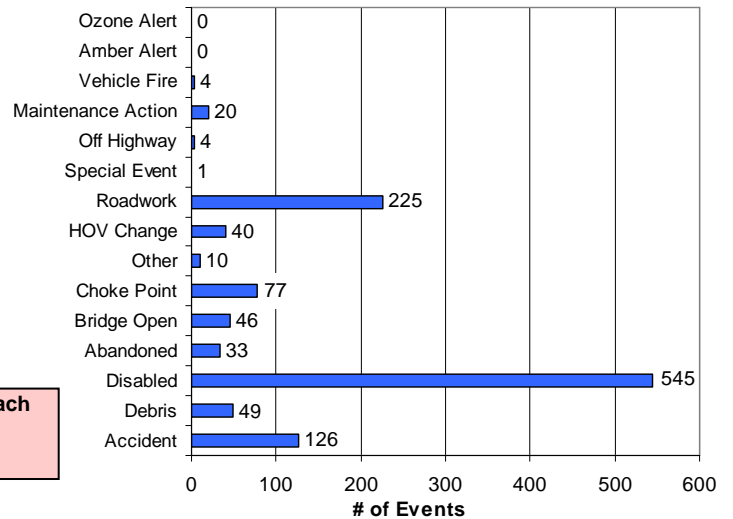
Note: Definitions for 'Incident' and 'Event' are located on page 9 of the Data Key



Operations



Events Logged by Type

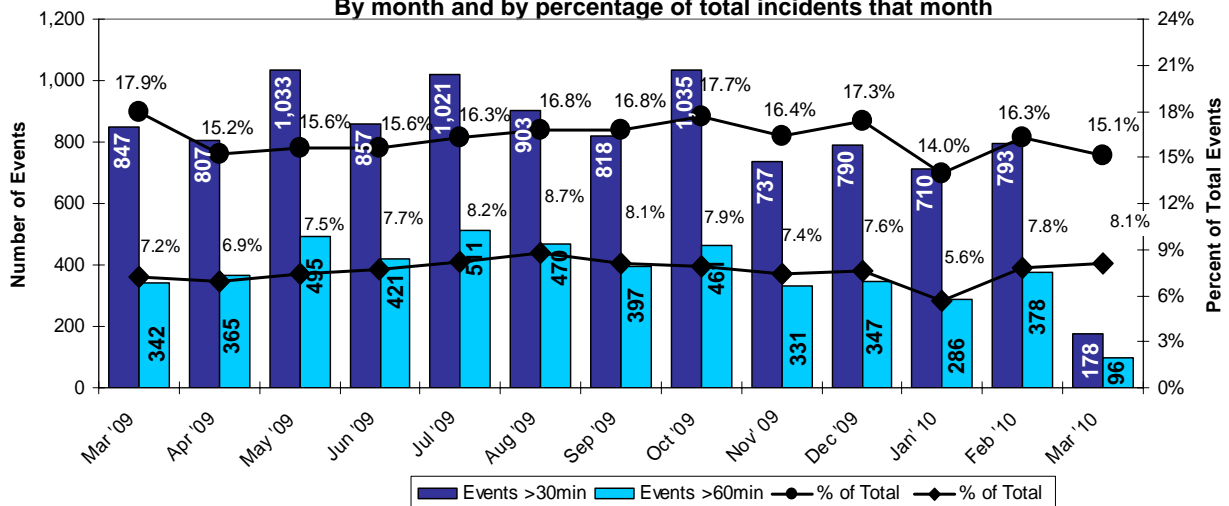


	Norfolk	Virginia Beach	Chesapeake	Suffolk	Portsmouth	Newport News	Hampton	Tunnel	Northern Neck*
5-Mar	382	151	174	34	67	113	138	45	76
26-Feb	417	147	186	23	75	99	122	51	77
19-Feb	343	104	150	23	71	125	144	64	80
12-Feb	538	105	177	24	86	96	156	69	88
5-Feb	349	145	218	37	93	114	146	44	79
29-Jan	339	114	133	19	89	95	144	73	79
22-Jan	309	115	151	28	68	116	126	40	72

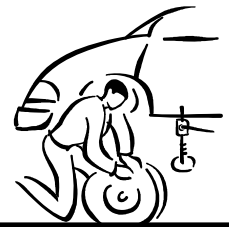
Note: Definitions for 'Incident' and 'Event' are located on page 9 of the Data Key

Events Greater Than 30 and 60 Minutes

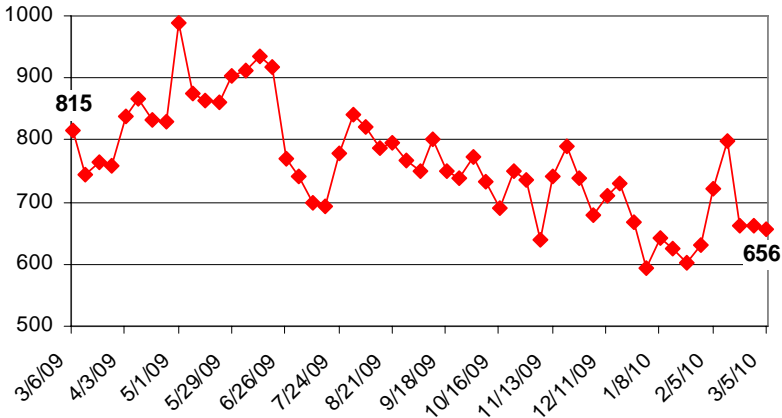
By month and by percentage of total incidents that month



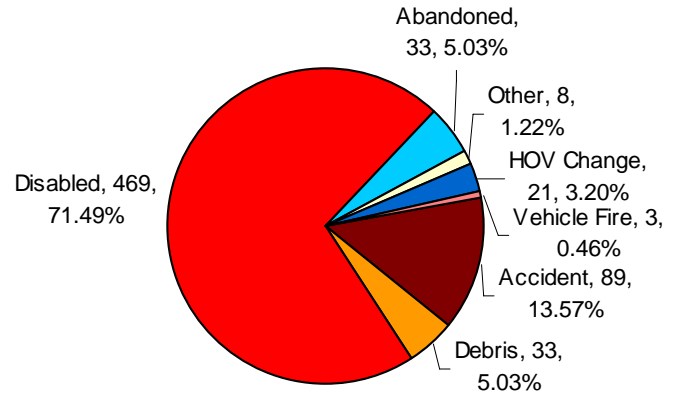
Operations



Total SSP Responses
By week for the preceding year

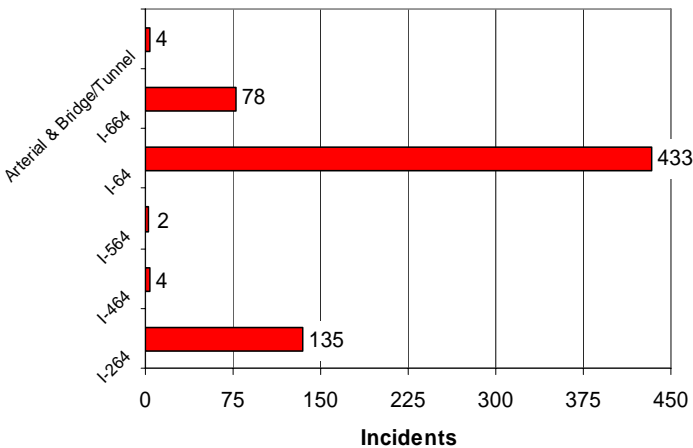


SSP Assists by Type

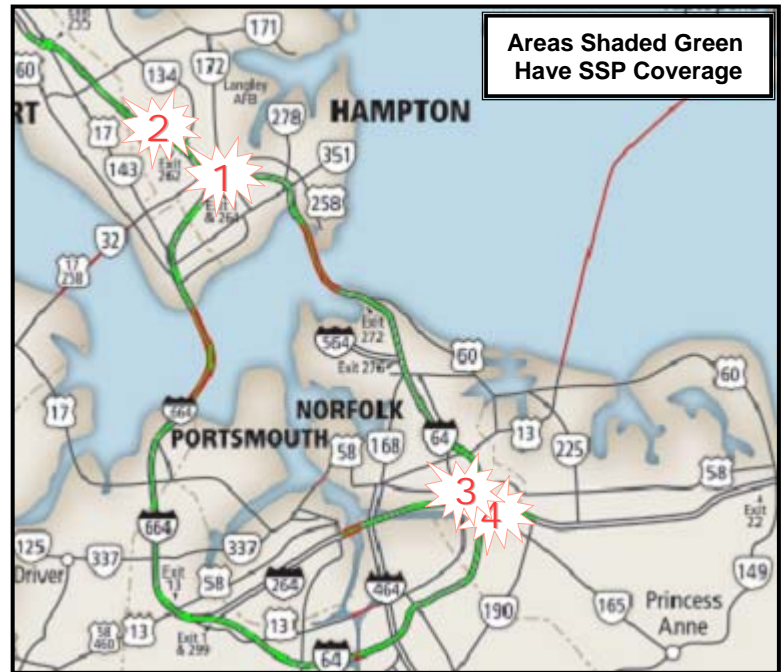


* On June 20th 2009 the number of SSP personnel and the number of covered routes were reduced by approximately 50%. *

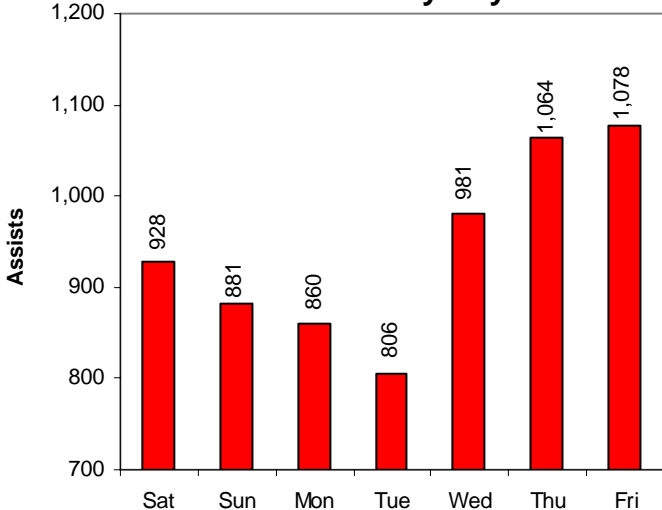
Number of SSP Assists by Roadway



Most Active Hot-Spots by Incident Type



Total YTD Assists by Day-of-Week



Most Active	Interstate	Segment ID	# of Incidents	% of Incident Type
1 Abandoned Vehicles	I-64	64-30	3	9.1%
2 Accidents	I-64	64-33	6	4.8%
3 Debris Removed	I-64	64-11	7	14.3%
4 Disabled Vehicles	I-64	64-11	37	6.8%

Segment ID: Descriptions	
64-30	64 / 664 Interchange - Mercury Blvd
64-33	Hampton Roads Center Pkwy - J Clyde Morris Blvd
64-11	64 / 264 Interchange - Northampton Blvd
64-11	64 / 264 Interchange - Northampton Blvd



Maintenance

Current Field Device Operational Availability*

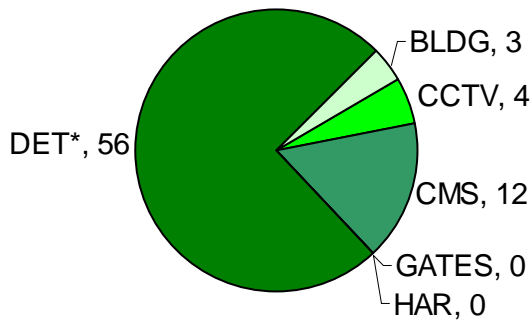
Component	Total	Not Working	Working	System Availability
CCTV	270	29	241	89.3%
CMS	192	28	164	85.4%
GATES	5	0	5	100%
HAR	6	1	5	83%
DET***	235	202	33	14%

* Represents last weeks equipment availability as of Friday @ 1400

** Represents CMS signs with legibility limitations

*** Represents individual detector stations

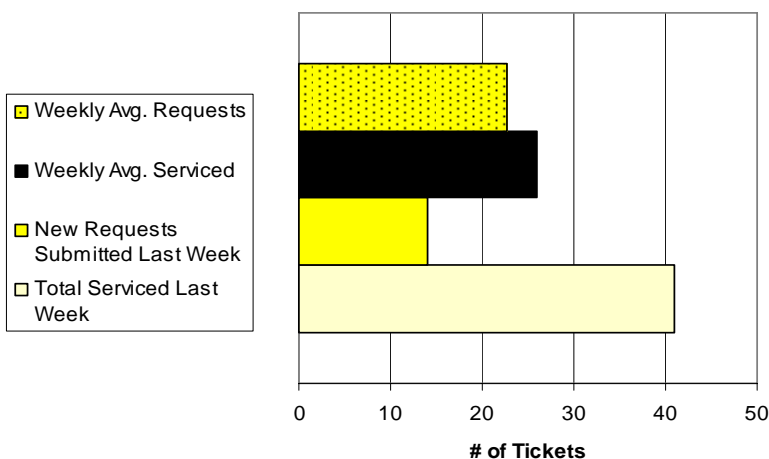
Number of PM Repairs Made by Equipment Type



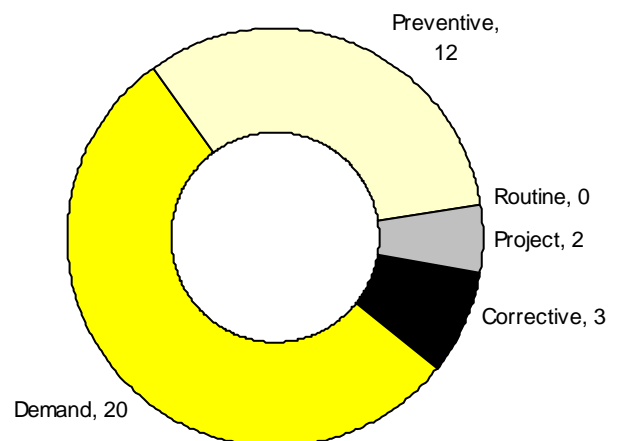
	56 Week Average
CCTV	9.3
CMS	7.4
GATES	0.6
HAR	1.2
DET	15.4
BLDG	3.9

*PMs for the category of "DET" are for Detector Cabinets, not Detector Stations

Work Orders Submitted to/Service by IT



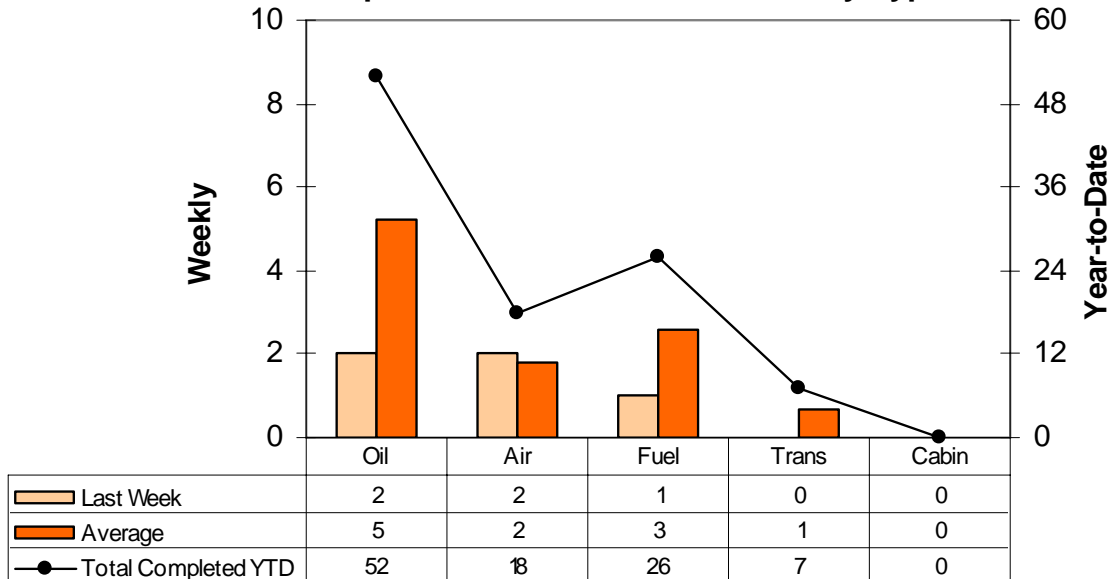
IT Facility Maintenance Activity



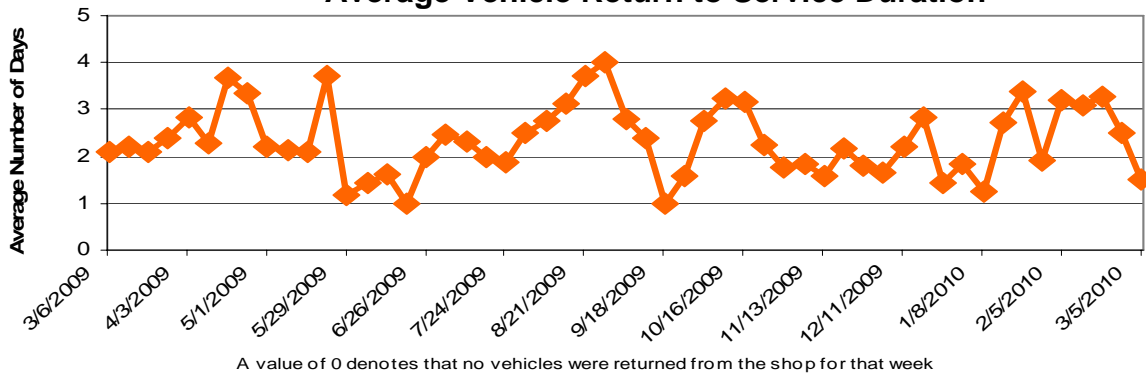
Maintenance



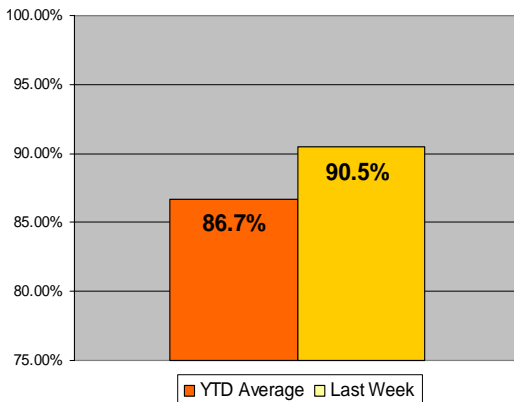
Completed Fleet Service Activities by Type



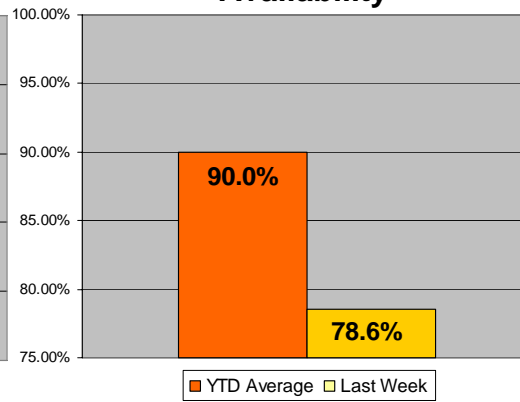
Average Vehicle Return to Service Duration



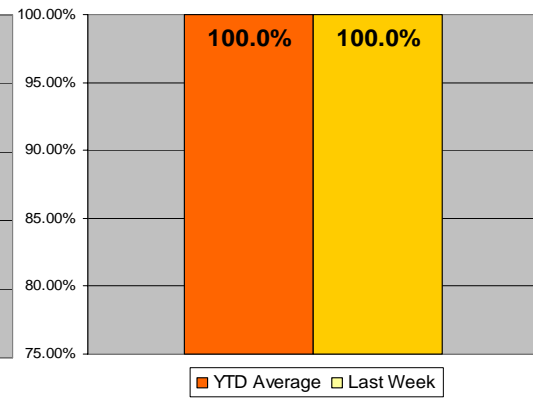
SSP Vehicle Availability

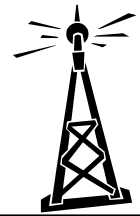


Field Maintenance Vehicle Availability



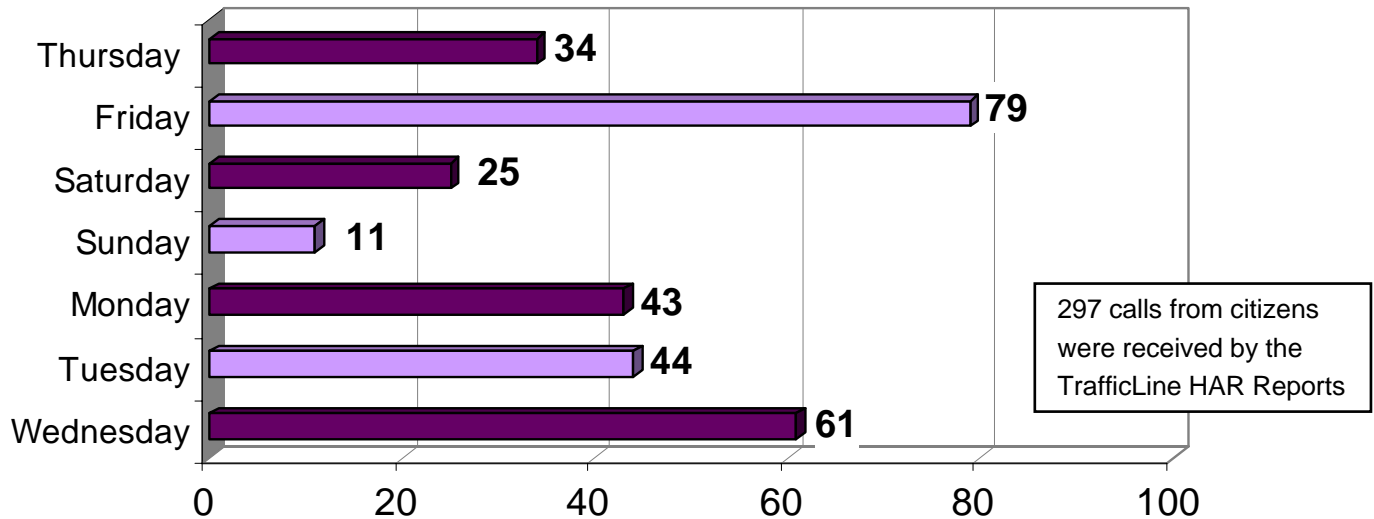
Pool Vehicle Availability





Public Information & Media Relations

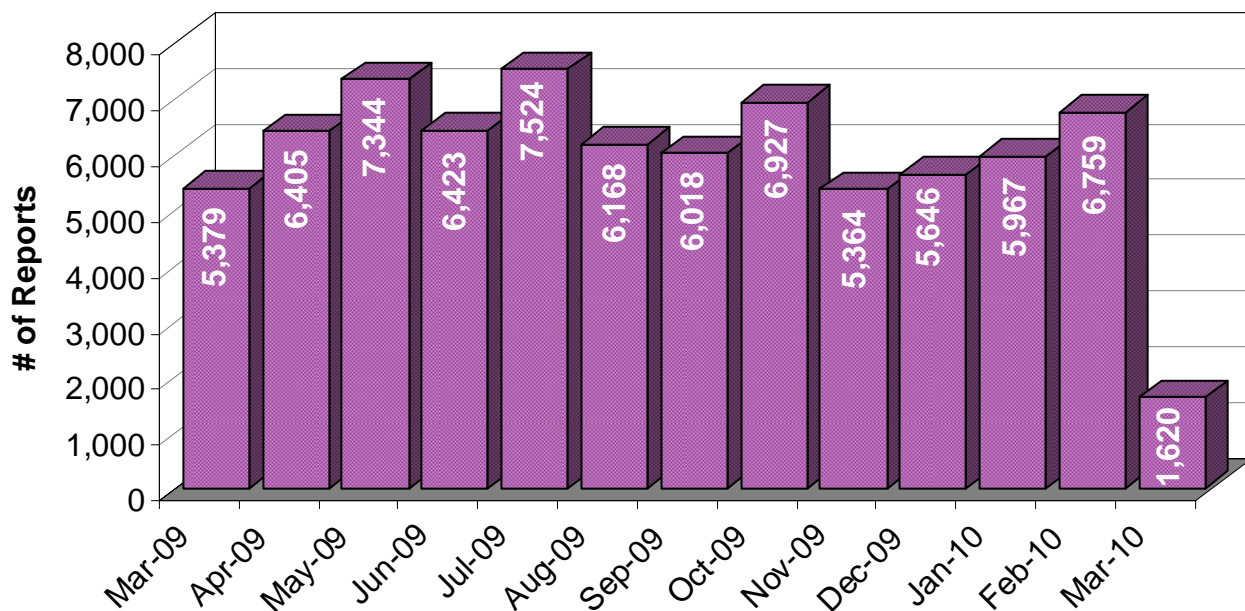
Calls Received On the Hampton Roads TrafficLine



Last updated 3-3-2010

Highway Advisory Radio Reports

Total AM and PM Reports by Month. Current month reflects 'to-date'



Data Key



Cover Page

The Number of Events Responded to From the Control Room Last Week

Description: Shows the actual past week and yearly average event count.

Purpose: Provides a snapshot of how many events were responded to the previous Saturday through Friday. Weeks tallying many events will correlate with an increase in VOIS/511 traveler information calls.

The Number of Drivers Assisted by Safety Service Patrollers

Description: Shows the actual past week and yearly average number of SSP assists for accidents and disabled vehicles.

Purpose: Gives a snapshot view of the quantity of accident and disabled vehicle assists provided by SSP's. These assists reflect direct STC customer contact, an important part of the STC mission.

Field Equipment Responsive and Preventive Repairs Made Last Week

Description: The values shown reflect the total number of responses to field equipment corrective maintenance requests and the total number of preventive maintenance actions completed during the seven day period.

Purpose: Provides a summary view comparing the amount of corrective maintenance being completed in relation to preventative maintenance. As a general rule, a 2:1 (responsive : preventative) is a good ratio.

SSP Truck Availability Last Week

Description: The percentage of the SSP vehicle fleet that was available for use last week (versus being out of service for maintenance), and a yearly average of that availability.

Purpose: The values of these number is an indicator of vehicle repair activity and is used in support of scheduling and planning activities.

IT Work Orders Completed Last Week

Description: These values provide a summary view of help desk, software maintenance, integration support and other (non-categorized) type IT systems and software work orders closed during the past week's reporting period.

Purpose: Summarizes the level of IT effort from the previous week in comparison to same period averages.

Total Number of SSP Fuel Assists Last Week

Description: Displays the weekly number of gallons of fuel dispensed by the SSP's. Also included is the year to date average per week. This number is an estimated one gallon of gas per SSP fuel assist.

Purpose: Reflects the most tangible type of assistance provided by the SSP's. Unlike other SSP assistance types (changing a tire), fuel can be counted as a direct unit cost. Therefore, with gas prices the way they are, this particular type of assistance has a profound effect on the cost of operations.

Data Key (continued)



Operations

Number of Events Logged by the Control Room

Description: This bar graph shows values for the number of events logged in the incident database for the prior week and for two weeks ago, and includes an average of the weekly values over the past year.

** **Incidents** are defined as *unplanned situations adversely impacting traffic flow such as accidents, debris, disabled vehicles, and abandoned vehicles.*

** **Events** are defined as *'special events' not affecting traffic, as well as the above defined 'Incidents'.*

Purpose: Shows how the current value compares to a two-week prior and an annual average value. For comparison and analysis, reveals the past week's numbers relative to "normal" levels and aids in forecasting activity levels based on seasonality, weather, holidays and/or other events.

Events by Detection Source

Description: The bar graph provides a tally of last week's events, broken down by their detection source (Virginia State Police [VSP radio or computer aided dispatch], Control Room [CCTV], public [phone call], SSP detection [SSP], and other entity [other – i.e. field contractor, fire department, etc]).

Purpose: Permits a comparison of incidents counts sorted by the various means of incident discovery, and a historical perspective when compared with previous reports. Identifies the sources of most our incident discoveries and those sources that need to contribute greater to detection.

Incident Duration

Description: The graph shows the average time duration from incident detection by a source (CCTV, Phone Call, VOIS, VSP CAD, VSP Radio, and Other) to when an SSP truck arrives on scene; the time from SSP arrival until the incident (Abandoned, Accident, Debris, Disabled) is completely cleared; and the total amount of time from initial detection to complete clearance.

Purpose: This information is used for extemporaneous audits. Allows management to review incident durations in relationship to pre-determined goals and provide a benchmark for incident response.

Incidents Involving Tractor-Trailers

Description: This bar graph shows the number of incidents involving tractor-trailers last week, for the same week last year, and the average for all weeks in the past year.

Purpose: Incidents involving tractor-trailers can take considerably longer to clear and thus have the capability to cause a negative effect on traffic flow and lane clearance. A high number of tractor-trailer incidents can have a negative effect on the number of incidents cleared within the 30 and 60 minute benchmark (see later in this report).

Event by Geographic Location

Description: This graph shows the number of events logged per locale by SSP drivers. Certain categories of events are not included in this tally because they are not defined by municipality. These categories include Bridge/Tunnel, Reversible Gates, TEOC, and VMS.

Purpose: This will aid in determining areas of high demand for SSP services and help to adjust scheduling and routes accordingly.

Data Key (continued)



Operations (continued)

Events by Type

Description: This graph enumerates event counts for the past week, and shows the value for each type: Amber and Ozone Alert (i.e. the HRTMC displayed a message on the VMS alerting public of the current situation), vehicle fire, special event (e.g. concert or college graduation), maintenance action, roadwork (i.e. stationary work zone, emergency maintenance, mobile lane closure), HOV change (manual change made to the HOV system from the control center), other** (i.e. police or medical emergency), choke point and bridge open (i.e. the HRTMC was involved in managing congestion at the HRBT, MMBT, Downtown Tunnel, or during a bridge opening), disabled** (disabled vehicle), debris** (i.e. ladder, mattress, road kill, etc.), accident**, and abandoned (abandoned vehicle).

**Note: The types unfounded (i.e. cancelled call before the SSP arrived), CBA (cleared before arrival – before an SSP arrived on the scene) are considered subcategories of these types. VMS Change, and TEOC (service request submitted to the District's Transportation Emergency Operations Center) are no longer types.

Purpose: This chart is used to quantify which categories of incidents most severely impact the roadways. Over time and by season comparisons are possible by examination of previous reports.

Events of Duration Greater Than Thirty/Sixty Minutes

Description: This graph totals those events which lasted more than thirty minutes and those events which lasted more than sixty minutes in duration. Percentages of total events are included.

(Note: Event types changed during the November 2007 Incident Database upgrade, see Data Key – 'Number of Events Logged by the Control Room' to view types and definitions)

Purpose: This information is used to compare the activity levels of 'serious events' that take longer than the normal clearance time. Results can spotlight contributing factors as short staffing, inter-agency communication, and patrol route inefficiencies.

Total SSP Responses

Description: The accompanying line graph displays SSP assist counts by the week.

Purpose: The graph can be used to substantiate the number of SSP responses for recent weeks. The information can be used to plan future route expansion and staffing levels.

SSP Assists Count by Type

Description: This pie chart shows the relative values for the major types of SSP assists last week. Types include disabled (disabled vehicles), debris (i.e. trash in roadway), accidents, unfounded (cancelled call out of an SSP), CBA (cleared before arrival), and other (i.e. traffic control for police activity).

Purpose: Provides information used for forecasting SSP vehicle equipment, tool, and consumable material (flares, batteries) needs short term and long term, and, to an extent, future staffing requirements.

SSP Assists for Each Roadway

Description: This graph shows the number of SSP assists over the past week, displayed for each freeway that the STC oversees. Also included are infrequent responses on arterial roads, bridges, and tunnels.

Purpose: Used to substantiate the number of SSP responses by freeway assignment. This information can be used to plan future patrol area expansion and definition, as well as staffing levels by roadway.

Data Key (continued)



Operations (continued)

Total Year-To-Date Assists by Day-of-Week

Description: This chart depicts the number of SSP assists rendered for each day, for this year to date.

Purpose: Helps in planning daily staffing levels based on year-to-date activity levels by day.

Most Active Hotspots

Description: This table shows, for four incident categories, the identifier for the most active section, last week's incident count for that section, and the percentage of the system-wide incident total that count represents.

Purpose: Review of these values permit management to detect emerging patterns and plan SSP staffing and routes in relation to those areas requiring the most attention.

Maintenance

Current Operational Availability List

Description: This table shows the total number of units of each equipment type (CCTV, CMS, gate, and HAR), how many are working and how many are not. The number of working units expressed as a percentage of the total units is also included.

Purpose: This information provides maintenance a clear view of the percentage of working equipment, provides operations a notion of system "eyes and ears" limitations, and provides management information as to current levels of equipment unit functionality.

Number of Preventive Maintenance Repairs Made by Equipment Type

Description: This chart and the accompanying table show the preventive maintenance tasks completed during the past week, and weekly averages for the last year. In addition to the five main equipment categories, buildings are included.

Purpose: Helps management allocate PM resources (equipment) and keep to schedule.

IT Facility Maintenance Activity

Description: This donut graph shows IT Department tasks completed during the past week for work types: corrective - "My printer is not working, please fix it"; demand - "I need a new printer"; preventive - regular PM on a schedule; transferred - "This printer is not an STC asset"; routine - a replacement printer every three years, for example.

Purpose: The breakout supports management in the allocation of staff, equipment, and budget resources at Hampton Roads STC.

Work Orders Submitted to / Serviced by IT

Description: These bar graphs show the number of new work orders submitted to the IT Department last week, and the number that were closed (completed). Weekly average values are also graphed.

Purpose: The metric helps track IT Department workloads, in support of IT staff/resource allocation and scheduling.

Data Key (continued)



Maintenance (continued)

Completed Fleet Service Activities by Type

Description: The chart shows weekly, average, and year to date counts for vehicle maintenance services. “Cabin” denotes replacement of passenger compartment air filters; “Bio-con” denotes treatment of diesel vehicle fuel systems for algae; “Therapy” denotes a gasoline or diesel vehicle fuel treatment. Oil, air filter, fuel filter, and transmission fluid services are also represented.

Purpose: Helps to account for labor and dollars expended for vehicle service and to plan for future contract and material expenditures.

Average Vehicle Return to Service Duration

Description: These numbers are an average time value representing a “return-to-service” duration; the elapsed time from arrival at the vehicle repair location until the vehicle returns to service. Values for SSP, Field Maintenance, and pool vehicles are included.

Purpose: These values also measure the performance of the repair effort and are used in scheduling SSP vehicle service and Patroller/Maintenance Staff resources.

STC Vehicle Availability

Description: The three bar graphs show what percentage of the total SSP, maintenance, and pool vehicle fleet was available last week, and also provide an annual average for comparison.

Purpose: These numbers measure fleet service effort and success rates.

Public Information

Calls Received on the Hampton Roads TrafficLine (757-361-3016)

Description: The Hampton Roads TrafficLine was launched on Friday, December 15. This bar graph depicts the number of citizen phone calls to the TrafficLine in order to receive information about Hampton Roads traffic conditions at different locales.

Purpose: This information depicts the use of the TrafficLine and will indicate if further promotion of the program is necessary.

HAR Reports

Description: Highway Advisory Radio (HAR) messages are created and updated several times during the day. This item tallies the number of HAR updates made month-to-date, and includes the values for previous months for comparison.

Purpose: The graph shows how the current value compares to past months; the count mirrors event activity on STC monitored roadways. The count is also an indicator for the effort expended in keeping the HAR message up-to-date, in order to maximize the public’s usability of the HAR resource.